

1994 Silvicultural Activities Report

Compiled from the 1994 Landowner Reports

*Data collected under the provisions of
Title 12 MRSA §8885*

September 1995



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1994 Silvicultural Activities Report

The information contained in this report represents forest management activities that occurred between January 1 and December 31, 1994 according to forest *landowner reports* filed with the Maine Forest Service (MFS) in 1995.

All landowners who conduct a timber harvesting operation must file an *Intent to Harvest Commercial Forest Products* (notification) before beginning the operation. Following receipt of the notification each landowner is sent a form on which to report their management activities. Return rate on these reports for 1994 was 95%.

Graphs representing forest activities are included with this report. Prior to 1990 landowners were not required to file a notification; therefore, there was a significant underreporting of activities. Keep this in mind when comparing activities before 1990 to those from 1990 and later years. The information from 1990 onward is more reliable.

Activities in the forest affect everyone. These activities supply resources to build homes, provide furniture, supply paper products, provide wildlife habitat and recreation, and protect valuable soils and clean water.

Notes & Definitions

☐ Forestland Ownership

- **Forest industry.** Land owned by a forest products industry; usually most of the wood harvested is used by that industry.
- **Private.** Private ownership but NOT by a forest industry. This includes lands of other industries that are not forest industries.
- **Other.** Lands owned by a government entity -- municipal, county, or state, quasi-public lands, etc.

- ☐ **Timber Stand Improvement.** Timber Stand Improvement (TSI) - "TSI" is pre-commercial thinning or weeding of young stands to improve the growing conditions for the residual crop. In a TSI procedure there is no, or very few, commercial forest products harvested. This report shows the number of acres thinned or weeded using mechanical means (saws, axes, etc.).

- ☐ **Change of (land) Use** Change of land use for a particular area means that following timber harvesting the subsequent use does not include growing *forest products*. Such change of use includes but is not limited to the following: farm pasture, site for growing agricultural crops, residential dwelling unit, development site. The division of forestland into smaller units does not by itself automatically constitute a change of land use.

- ☐ **Forest products** means logs, pulpwood, veneer, boltwood, wood chips, stud wood, poles, pilings, biomass fuelwood, fuelwood or other products commonly known as forest products, but does not include Christmas trees, maple syrup, nursery products used for ornamental purposes, wreaths, bough material, cones or other seed crops.

☐ Types of harvest

- **Partial harvest.** All harvest systems except clearcut harvest.
 - **Selection system.** A selection cutting system is a method where trees are removed individually, here and there, from a harvest site. In the case where all trees above a specified diameter are harvested (diameter limit) the acreage is recorded on this line.
 - **Shelterwood system.** A shelterwood cutting system is a method of harvesting mature timber from a forest site in two or more stages. The first stage removes only a portion of the trees to allow regeneration to become established before the remaining trees are removed in subsequent harvests.
- **Clearcut harvest.** Clear-cut means any timber harvesting on a forested site greater than 5 acres in size which, over a 10 year, period results in an average residual basal area of trees over 6 inches in diameter of less than 30 square feet per acre, unless one or both of the following conditions exist: A. If, after harvesting, the average residual basal area of trees over 1 inch in diameter measured at 4.5 feet above the ground is 30 square feet per acre or more, a clear-cut does not occur until the average residual basal area of trees 6 inches or larger measured at 4.5 feet above the ground is less than 10 square feet per acre; or B. After harvesting, the site has a well-distributed stand of trees at least 5 feet in height, that meets the regeneration standards applicable under 12 MRSA, c. 805, §8869, subsection 1.

Highlights

- ☐ The total area harvested increased by 12%, from 449,996 acres in 1993 to 504,592 acres in 1994. The total area clearcut increased by 5% while partial cuts increased by 13%.
- ☐ There was an 11% increase in supervision by a forester.
- ☐ The use of herbicides to release competing vegetation decreased from 55,385 acres (in 1993) to 52,939 acres (in 1994) -- a decrease of 4%. Herbicide used for site preparation increased by 610 acres.
- ☐ Mechanical thinning -- using saws and axes -- decreased by 13%.
- ☐ Land Use Conversion -- changing from a forest to some other primary land use -- decreased by 12%.
- ☐ Tree planting as reported here, is only from those owners who filed a landowner report. Plantings done on locations where the plantation owner harvested no wood are not required to be reported.

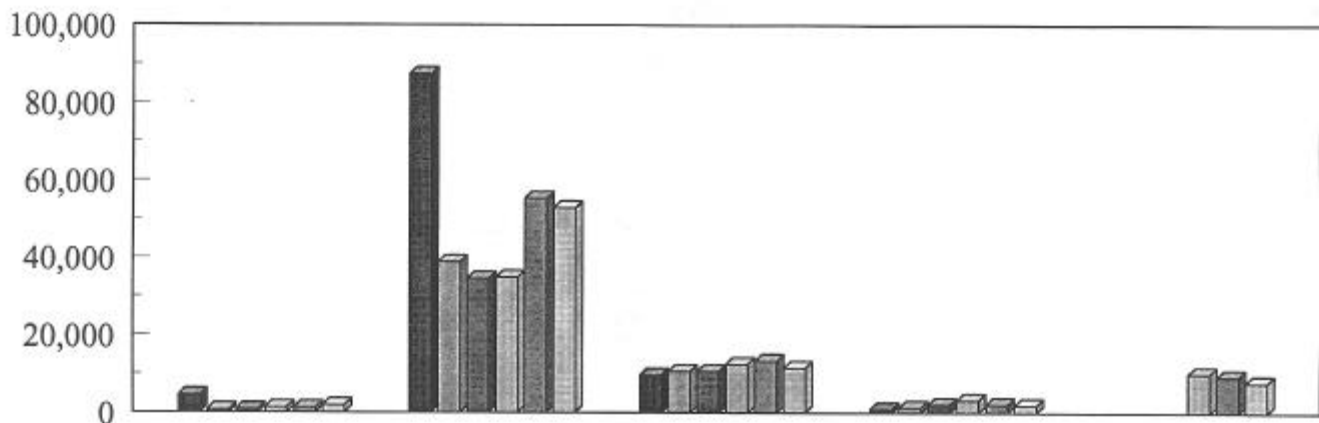
1994 Report on Silvicultural and Harvesting Practices

	1994				1993 (Corrected)	
	Acreage class			Total 1994	Total 1993	%change 1993-1994
	1-1000	1001-5000	5000+			
Forestland Ownership: Number of Reports						
Forest Industry	14	12	464	490	526	-7%
Private	3,304	171	266	3,741	3,530	6%
Other	32	5	74	111	134	-17%
Total	3,350	188	804	4,342	4,190	4%
Forest Industry	0.42%	6.38%	57.71%	11%		
Private	98.63%	90.96%	33.08%	86%		
Other	0.96%	2.66%	9.20%	3%		
Total	100%	100%	100%	100%		
Non-Harvesting Activities (acres)						
Timber Stand Improvement (TSI)						
TSI Mechanical	4,042	105	7,504	11,651	13,385	-13%
Herbicide Treatments						
Site Preparation	37	2	1,911	1,950	1,340	46%
Release	132	1	52,806	52,939	55,385	-4%
Total	169	3	54,717	54,889	56,725	-3%
	0.31%	0.01%	99.69%	100%		
Tree Planting						
(AS REPORTED ON LANDOWNER REPORTS ONLY)	343	13	7,469	7,825	9,382	-17%
Land Use Conversion						
Change to other use	1,664	105	175	1,944	2,201	-12%
Harvesting Activities (acres)						
Partial Cut Methods						
Shelterwood cuts	9,948	4,018	83,688	97,654	75,267	30%
Selection cuts	118,504	22,020	212,652	353,176	323,476	9%
Total Acres	128,452	26,038	296,340	450,830	398,743	13%
	28%	6%	66%	100%		
Clearcutting Methods						
Total acres	3,255	2,688	47,819	53,762	51,253	5%
	6%	5%	89%	100%		
Total partial and clearcut harvest, by acres						
Total Acres	131,707	28,726	344,159	504,592	449,996	12%
	26%	6%	68%	100%		
Distribution of partial and clearcut, by percentage						
Partial cut methods	98%	91%	86%	89%		
Clearcut methods	2%	9%	14%	11%		
Total	100%	100%	100%	100%		
Forester Supervision (acres)						
Amount of total harvest supervised by Forester	57,775	21,356	329,268	408,399	367,322	11%
% Forester supervision	44%	74%	96%	81%		

source: Maine Forest Service, September 1995

Silvicultural Trends

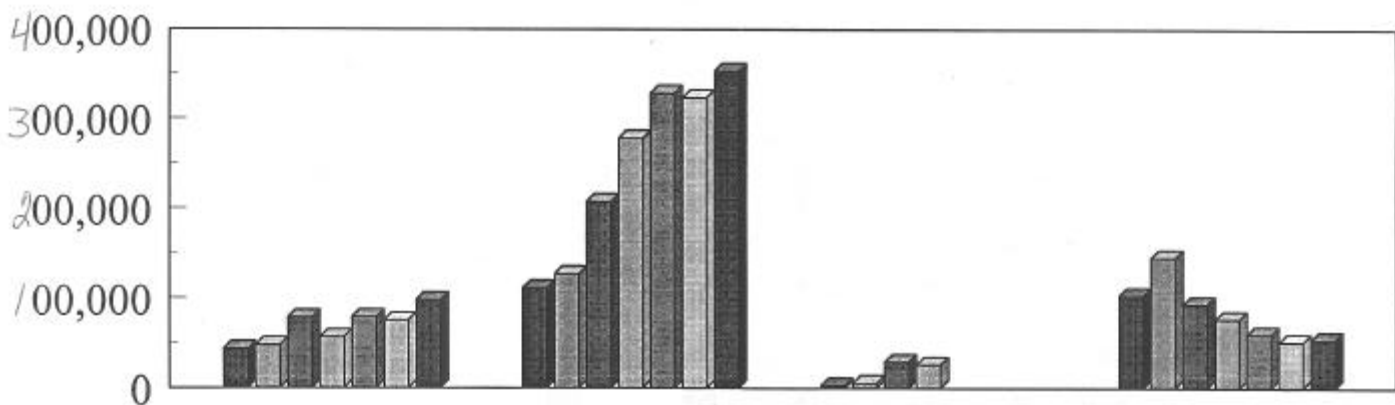
acres of forestland



	Site Prep. Chem.	Chem. Release	Mech. Release	Land Conversion	Tree Planting
1989	4,489	87,481	9,720	990	
1990	776	38,939	10,754	1,447	
1991	895	34,690	10,747	2,155	
1992	1,342	34,962	12,636	3,296	10,109
1993	1,340	55,385	13,385	2,201	9,382
1994	1,950	52,939	11,651	1,944	7,825

Harvesting Trends

acres of forestland



Year	Shelterwood cut	Selection Cut	All Other	Clearcut
1988	43,650	111,472	3,276	102,932
1989	47,781	127,120	5,799	145,357
1990	78,558	207,706	29,127	93,259
1991	56,530	278,141	25,949	76,672
1992	78,888	328,488		59,602
1993	75,267	323,476		51,253
1994	97,654	353,176		53,762